Work Order ID 65303 -Page 1 January 11, 2011 9:21:10 AM Item ID: D3315-4 Accept Setup Start Revision ID: Stop Item Name: Wearplate 1/18/11 Start Qty: 6.00 Start Date: Cust Item ID: Req'd Qty: 6.00 Required Date: 1/31/11 Customer: Reference: Run Start Date: //- 01-11 Approvals: Process Plan: Tooling: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Tool # Plan Set Up/ Tool ID Accept Reject Reject Insp. Work Center ID Description Run Hours Code Qty Qty Number Stamp Revision Nbr Draw Nbr D3315 Rev B 100 0.00 FLOW WATER JET B11-2-14 Waterjet 0.00 Memo Prog Rev. R FLOW CNC Waterjet 1-Cut as per Dwg D3315 Dwg Rev: 1010 - 003 Deburr if necessary QC2- Inspect parts off machine FAI/FAIB 110 0.00 BU- 3-14 0.00 Memo Quality Control 120 QC8- Inspect parts - second check 0.00 Memo Quality Control

Dart Aer	ospace	Ltd						• •
W/O:			W	ORK ORDER CHANGES				
DATE	STEP	PROC	EDURE CH	ANGE	Ву	Date Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
				_				
Part No		PAR #:						<u> </u>
	He	solution:					Date: _	
NCR:		We	ORK OR	DER NON-CONFORMANO	CE (NCR))		
		Description of NC		Corrective Action Section B		Verification	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	QC Inspector

NCR:			WORK ORDER NON-CONFORMANCE (NCh)										
UP-10-20-VIIII		Description of NC	4.	Corrective Action Section B			Approval	Approval					
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Verification Section C	Chief Eng	QC Inspector					
								300					
		×	-										

Work Order ID 65303

January 11, 2011 9:21:11 AM



Page 2

Item ID:

D3315-4

Accept

Setup Start

Stop



Revision ID:

Item Name: Wearplate

1/18/11 Required Date: 1/31/11

QC:

Start Qty: 6.00 Req'd Qty: 6.00

Cust Item ID:

Customer:

Tool ID

Reference:

Start Date:

Approvals:

Process Plan:

Date:

Date:

Tooling:

SPC (Y/N):

Date:

Date:

Tool# Plan

Code

Run Start

Reject

Qty

Stop

Reject

Number



Insp.

Stamp

Sequence ID/

Work Center ID

130

Brake NC

Brake NC

Operation

NC BRAKE

Description

Set Up/ Run Hours

0.00

Memo

Form using DT8179 Die and DT8157 as per Dwg D3315 Rev:

SB 11/02/15

140

Quality Control

QC6- Inspect dimensions to drawing

Memo

Accept

Qty

(6)

150

Large Fab

Large Fab

Large Fab

Memo

N/A

Weld hard surface using D3315-4T3 as per QSI 004 and Dwg D3315 Rev. Part Number Description

7560 Hardcoat Rod

0.00

0.00

-- EL 11-2-27

Dart	Aeros	pace	Ltd
Dail	MCIUS	Dace	Lu

W/O:			W	ORK ORDER CHANG	ES					
DATE	STEP	PRO	CEDURE CH	ANGE	В	y	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
									r rod wigi	
				-						
Part No		PAR #:	Fault Cat	egory:	NCR: \	res N	o DQ	A:	_ Date: _	•
	R	esolution:	Disposition	on:	_ QA: N/	C Clos	ed:		Date:	
NCR:		V	VORK ORE	DER NON-CONFORMA	NCE (N	ICR)				
		Description of NC	0	Corrective Action Section			Verifi	cation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		ign & Date		tion C	Chief Eng	QC Inspector
										*3

Work Order ID 65303

January 11, 2011 9:21:11 AM



Page 3

Item ID:

D3315-4

Revision ID:

Wearplate Item Name:

Start Date:

1/18/11

Start Qty: 6.00

Required Date: 1/31/11

Req'd Qty: 6.00



Accept



Setup Start



Stop

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

0.00

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Set Up/

Run Hours

Date:

Stop

Sequence ID/ Work Center ID

160

Quality Control

Operation Description

QC10- Inspect visual per QSI004- ground welds

0.00 8 Mo2/23

Tool ID

Tool# Plan Code

Reject Accept Qty Qty

Reject Number

Insp. Stamp

Memo

Memo

170

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

0.00

0 uloz/23

180

Powdercoat

Powder Coating

Grey Sandtex(Ref.4.3 5.6) per QSI005 4.3

FINISH TIME:

BR 11-2-23.

Dart Aerospace Ltd WORK ORDER CHANGES W/O: Approval Approval STEP PROCEDURE CHANGE Bv Date Qtv Chief Eng / DATE OC Inspector Prod Mar Part No: _____ PAR #: ____ Fault Category: _____ NCR: Yes No DQA: ____ Date: ____ Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____ WORK ORDER NON-CONFORMANCE (NCR) NCR: **Corrective Action** Section B Verification Description of NC Approval Approval DATE STEP Sign & **Action Description** Initial QC Inspector Section A Section C Chief Eng Chief Eng Date Chief Eng

Chief Eng Chief Eng Date

Chief Eng Chief Eng Chief Eng Date

Chief Eng Chief Eng Chief Eng Date

Chief Eng Chief Eng Chief Eng Date

Chief Eng Chief

Work Order ID 65303

January 11, 2011 9:21:14 AM



Page 4

Item ID:

D3315-4

Wearplate

Start Date:

Revision ID:

Item Name:

1/18/11

Start Qty: 6.00

Required Date: 1/31/11

Reg'd Qty: 6.00



Accept



Setup Start

Stop

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Cust Item ID:

Customer:

Tool ID

Run

Start

OC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID

190

Operation Description

QC3- Inspect Part Finish

Memo

Set Up/ Run Hours

0.00

0.00

Tool # Plan Qty Code

Reject Accept Qty

Reject Number

Insp. Stamp

Quality Control

200

Packaging

Packaging

Packaging

Memo

0.00

0.00

Identify on inside surface using a permanent fine point marker with the following: TCCA-PDA, Dart Aerospace Ltd. P/N: D3315-4, B/N:

BXXXXX For Product Eligibility see PDA04-17 and

Stock Location: (

QC21- Final Inspection - Work Order Release

210

Quality Control

Memo

0.00

0.00

Dart Aerospace Ltd W/O: WORK ORDER CHANGES Approval Approval DATE STEP PROCEDURE CHANGE Bv Qtv Chief Eng / Date QC Inspector Prod Mar Part No: PAR #: Fault Category: NCR: Yes No DQA: ___ Date: ___ Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____ WORK ORDER NON-CONFORMANCE (NCR) NCR: Corrective Action Section P

DATE OTED		Description of NC		Corrective Action Section B	Verification	Approval	Approval	
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Chief Eng	QC Inspecto
IOTE: D	ate & initial	all antring						

January 11, 2011 9:21:10 AM

Work Order ID: 65303

D3315-4

Parent Item Name: Wearplate



Start Date: 1/18/11

Required Date: 1/31/11

Start Qty: 6.00

Required Qty: 6.00

Comments:

Parent Item:

IPP: A 05.05.12 New issue KJ/JLM IPP Rev:B As per Rev B 06-03-24 JLM IPP Rev:C Now on Waterjet 07-07-11 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M1010S16GA		Purchased	No			100	sť	13.9250	2.296	14.50105	> 11.		N.

1010/1025 sheet 16GA

Location Loc Qty Loc Code MAT19 13.925 111410 116791 13.925 116791

Dart Ae	rospace	Ltd							* .
W/O:			WC	ORK ORDER CHANGES			à		
DATE	STEP	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
			Sa.						
		k 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							
Part No):	PAR #:	Fault Cate	gory: NC	R: Yes	No DQ	A:	_ Date: _	
	Re	esolution:	Dispositio	n: Q <i>A</i>	A: N/C CI	osed:		Date: _	
NCR:		\	WORK ORD	ER NON-CONFORMANC	E (NCF	R)			
		Description of NC	Description of NC Corrective Action Se			Verifi	cation	Approval	Approval
DATE	STEP	Section A	Initial Action Description Chief Eng Chief Eng		Sign 8 Date		tion C	Chief Eng	QC Inspector
									75

DART AEROSPACE LTD	Work Order:	65,000
Description: Wearplate	Part Number:	D3315-4
Inspection Dwg: D3315 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Х	First Article	Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
5.214	+/-0.010	CIEZ	P		V 1802	
4.402	+/-0.010	4400	P		V	
62.75	+/-0.030	62.75	8		T 1801	
58.094	+/-0.010	58,100	>		7	
Ø0.266 x Ø0.450	+0.006/-0.001	264 × 456,	>		V	
Ø0.300	+0.006/-0.001	-300	>		V	
1.62	+/-0.030	1.605	7		V	
5.375	+/-0.010	5,371	8		V	
10.594	+/-0.010	10.594	>		7	in the second
18.875	+/-0.010	18.875			7	A STATE OF
0.063	+/-0.010	,059	7		V	
						26
11		11.				
						-
	1					

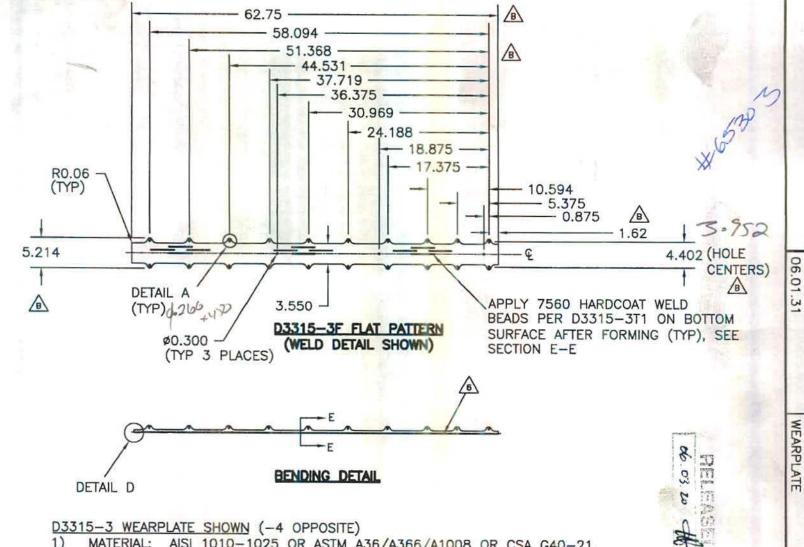
Measured by:	IB	Audited by:	8	Prototype Approval:	N/A
Date:	11-2-14	Date:	1102/14	Date:	N/A

Rev	Date	Change	Revised by Approved
A	07.10.09	New Issue	Revised by Approved

Dart Aerospace Ltd

Dairrio	oopaoo								Electric Co.		
W/O:		WORK ORDER CHANGES									
DATE STEP		PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
							0.7		ĭ		
		***						==ux			
Part No	:	PAR #:	Fault Categ	ory:	NCR: Yes No DQA: Date:						
Resolution:			Disposition: Q		QA: N/C Closed: Date:						
NCR:		V	VORK ORDE	R NON-CONFORMA	NCE (NCR)					
DATE	STEP	Description of NC	Corrective Action Section		DIVIVEDO:	Verification		Approval	Approval		
DAIL	SILI	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section	on C	Chief Eng	QC Inspector		
							7				
									-		
		₩),									
			1								





MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 16 GAUGE (0.060 THICK)

POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3

3) WELD PER DART QSI 004

DOCUMENT

N

Copyright © 2004 by DART AEROSPACE PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM

NOT TO BE USED IN DART AEROSPACE

E FOR

ANY PURPOSE

유

COPIED

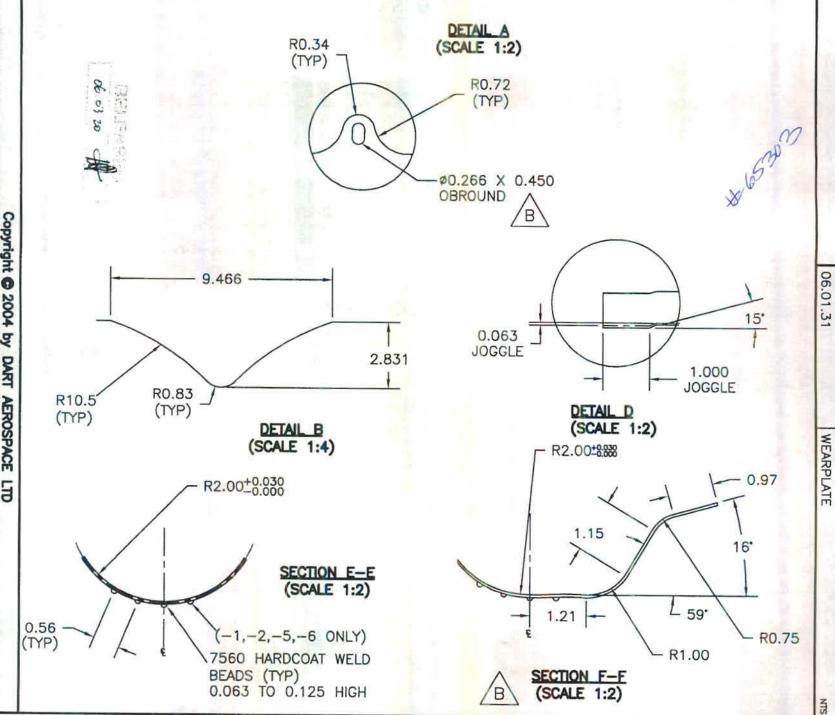
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

ALL DIMENSIONS ARE IN INCHES

IDENTIFY ON INSIDE SURFACE AS INDICATED "TCCA-PDA, DART AEROSPACE LTD., P/N D3315-X B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-17"

Dart	Aeros	pace	Ltd

W/O:			W	ORK ORDER CHANG	ES					
DATE	STEP	PROCEDURE CHANGE			Ву	Date	e Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
								i iod irigi		
Part No	:	PAR #:	Fault Cate	egory:	NCR: Ye	s No	DQA:	_ Date: _		
Reso		esolution:	Disposition: Q			A: N/C Closed: Date:				
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NO	CR)				
DATE	STEP	Description of NC	Corrective Action Section B			Ve	erification	Approval	Approval	
		Section A	Initial Chief Eng	Action Description Chief Eng	Sig Da	1 &	Section C	Chief Eng	QC Inspector	
				1997			.7			
								121		



THIS DOCUMENT ï Copyright © 2004 by DART AEROSPACE LTD

PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Dart Aerospac	e Ltd
---------------	-------

W/O:			W	ORK ORDER CHANG	ES				
DATE STEP		PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
								araod mgr	***
									e, d
_									
Part No	:	PAR #:	Fault Cat	egory:	NCR: Yes	No DQ	A:	_ Date: _	
		esolution:	Dispositi	on:	QA: N/C Cld	sed:	Date:		
NCR:		1	WORK ORI	DER NON-CONFORMA	NCE (NCR)			
DATE		Description of NC	Corrective Action Section B		on B	Verifi	cation	Approval	Approval
	STEP Description of NC Section A		Initial Chief Eng				tion C	Chief Eng	QC Inspector
				.25					
					-				
						4			